

**IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF IOWA
WESTERN DIVISION**

DAVID STULTS and BARBARA
STULTS,

Plaintiffs,

vs.

INTERNATIONAL FLAVORS AND
FRAGRANCES, INC., and BUSH
BOAKE ALLEN, INC.,

Defendants.

No. C 11-4077-MWB

**MEMORANDUM OPINION AND
ORDER REGARDING THE
PARTIES' EVIDENTIARY
MOTIONS**

FILED UNDER SEAL

TABLE OF CONTENTS

<i>I.</i>	<i>INTRODUCTION.....</i>	<i>2</i>
<i>A.</i>	<i>Background.....</i>	<i>2</i>
<i>B.</i>	<i>The Evidentiary Motions</i>	<i>3</i>
<i>II.</i>	<i>LEGAL ANALYSIS</i>	<i>5</i>
<i>A.</i>	<i>Challenges To Experts.....</i>	<i>5</i>
1.	<i>The challenges to the opinions of Dr. Pue and Dr. Swenson.....</i>	<i>5</i>
2.	<i>The challenges to certain opinions by any expert</i>	<i>7</i>
a.	<i>Opinions about what the defendants “knew” or “should have known”</i>	<i>7</i>
b.	<i>Opinions about David’s need for a lung transplant.....</i>	<i>8</i>
<i>B.</i>	<i>Challenges To Characterizations</i>	<i>9</i>
1.	<i>Characterization of diacetyl as comparable to substances spawning mass toxic tort litigation.....</i>	<i>9</i>
2.	<i>Characterization of NIOSH’s “recommendations” as “conclusions”</i>	<i>12</i>
<i>C.</i>	<i>Evidence Of Other Diacetyl Cases.....</i>	<i>13</i>
1.	<i>Out-of-court statements about other cases.....</i>	<i>13</i>

2.	<i>Evidence of other diacetyl lawsuits or claims</i>	15
D.	<i>Suggestions Of A Per Diem or Lump-Sum For Non-Economic Damages</i>	16
E.	<i>Challenges To The BASF Study And Material Safety Data Sheet</i>	19
F.	<i>Evidence Of The Stultses’ Settlements With Other Defendants</i>	22
III.	<i>CONCLUSION</i>	24

This products liability action, seeking damages for a lung injury to a consumer of microwave popcorn allegedly caused by diacetyl in the popcorn’s butter flavoring, is before me on numerous pretrial evidentiary motions. The numerous motions by the remaining defendants, who are butter flavoring manufacturers, challenge a wide range of evidence, including the testimony of the plaintiffs’ experts. The single motion by the plaintiffs challenges the introduction of evidence of their settlements with other defendants.

I. INTRODUCTION

A. Background

In this diversity action under Michigan products liability law, plaintiffs David Stults and Barbara Stults, husband and wife, allege that David developed “popcorn lung”—more specifically, *bronchiolitis obliterans* or BO—by consuming multiple bags of microwave popcorn and inhaling the fumes or vapors from them daily for several years.

The Stultses assert claims of strict liability, negligence, breach of warranty, and loss of consortium, all arising from David's respiratory injury allegedly resulting from his exposure to popcorn with butter flavorings containing diacetyl. The remaining defendants, International Flavors & Fragrances Inc., (IFF) and its wholly-owned subsidiary, Bush Boake Allen, Inc. (BBA), manufactured butter flavorings containing diacetyl and sold them to microwave popcorn manufacturers, including ConAgra Foods, Inc.

As I did in my recent Memorandum Opinion And Order Regarding Defendants' Motions For Partial Summary Judgment (docket no. 305), I incorporate here by reference the much more detailed factual background found in my December 24, 2013, Memorandum Opinion and Order Regarding Defendants' Motions For Summary Judgment (274). *See Stults v. Symrise, Inc.*, ___ F. Supp. 2d ___, ___, 2013 WL 6815062, *1-*14 (N.D. Iowa Dec. 24, 2013). I will discuss additional factual allegations, if necessary, in my legal analysis, below.

B. The Evidentiary Motions

In anticipation of a jury trial, set to begin on August 11, 2014, the parties have filed various evidentiary motions. Specifically, the defendants have filed the following motions:

1. A December 9, 2013, Motion In Limine To Exclude Any Argument Or Evidence Comparing Diacetyl And/Or Vapors From Microwave Popcorn Containing Butter Flavors With Added Diacetyl To Asbestos And Other Substances Subject To Mass Toxic Tort Litigation (docket no. 240);
2. A December 9, 2013, Motion In Limine To Exclude Reference To Recommendations From NIOSH As "Conclusions," "Legal Conclusions," Or "Scientific Conclusions" (docket no. 241);

3. A December 10, 2013, Motion In Limine To Exclude Any Evidence Of Statements Made By Out-Of-Court Declarants, Including Cecile Rose, M.D. And E. Neil Schachter, M.D., Regarding Other Microwave Popcorn Cases And Other Plaintiff-Consumers Of Microwave Popcorn (docket no. 244);

4. A December 10, 2013, Motion In Limine To Prohibit Plaintiffs' Counsel From Suggesting A Lump-Sum Amount Of Non-Economic Damages (docket no. 246);

5. A December 10, 2013, Joint Motion In Limine To Exclude The Opinions And Testimony Of Plaintiffs' Purported Expert, Dr. Charles Pue (docket no. 247);

6. A December 10, 2013, Joint Motion In Limine To Exclude Purported Expert Opinions Of Rodney A. Swenson, Ph.D., ABN (docket no. 248);

7. A December 10, 2013, Motion In Limine To Exclude Argument Or Evidence Regarding The Secret 1993 LC 50 Study Conducted By The German Company BASF And The Misleading 1994 BASF Material Safety Data Sheet (docket no. 249);

8. A December 10, 2013, Motion In Limine To Preclude Plaintiffs' Expert Witnesses From Offering Opinions About What Defendants "Knew" Or "Should Have Known" (docket no. 250);

9. A December 10, 2013, Joint Motion In Limine To Exclude All Testimony Regarding Plaintiff David Stults' Alleged Potential Need For A Lung Transplant (docket no. 251); and

10. A December 10, 2013, Joint Motion In Limine To Exclude All Testimony And Evidence Regarding Other Lawsuits Or Claims Involving Diacetyl (docket no. 254).

The Stultses have filed a single evidentiary motion:

A December 10, 2013, Motion In Limine To Exclude Any Reference To Plaintiffs' Settlements With Other Defendants (docket no. 253).

All of the evidentiary motions have been fully briefed. I will address the issues raised in the motions by topic, rather than in the order the motions were filed.

II. LEGAL ANALYSIS

A. Challenges To Experts

I will begin my legal analysis with the defendants' challenges to opinions by the Stultses' experts. These challenges include broad challenges to the expert opinions of Dr. Pue and Dr. Swenson, in the defendants' Motions 5 and 6, and narrower challenges, to certain opinions by any of the plaintiffs' experts, in the defendants' Motions 8 and 9.

1. The challenges to the opinions of Dr. Pue and Dr. Swenson

I recognize that, under *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993), I have a duty to perform a "gatekeeper" function, under Rule 702 of the Federal Rules of Evidence, so that only expert testimony that is relevant and reliable is admitted. 509 U.S. at 589. I also recognize that this "gatekeeper" function requires me to "make a 'preliminary assessment of whether the reasoning or methodology underlying the testimony is scientifically valid and of whether that reasoning or methodology properly can be applied to the facts in issue.'" *Kudabeck v. Kroger Co.*, 338 F.3d 856, 860 (8th Cir. 2003) (quoting *Daubert*, 509 U.S. at 592-93).

In this case, my "preliminary assessment," from my review of the submissions in support of and resistance to the defendants' motions to exclude various opinions by Dr. Pue and Dr. Swenson, is that the reasoning and methodology underlying the challenged opinions are scientifically valid and that the expert's reasoning and methodology can be applied to the facts in issue. *See Daubert*, 509 U.S. at 592-93 (first

step in the court's "gatekeeper" function under Rule 702); *Kudabeck*, 338 F.3d at 860 (same). Although the defendants are clearly unhappy with these experts' opinions, and have cloaked that unhappiness in challenges to "factual basis," "reasoning and methodology," and even the "qualifications" of the experts to state certain opinions, I find that the Stultses have shown that these experts' qualifications are adequate to state the opinions in question and that their reasoning and methodology are appropriate and apply proper scientific principles. Moreover, I find that the challenged opinions have an adequate factual basis, including the sources of data that the Stultses have identified, such that submission of these experts' opinions to a jury is warranted. I am also convinced that the proposed expert testimony is relevant and will aid the trier of fact. *Daubert*, 509 U.S. at 592 (second step in the analysis); *Kudabeck*, 338 F.3d at 860 (same). Indeed, I find that the defendants' challenges to these experts' opinions on various grounds are based on portions of reports or deposition testimony taken out of context and/or on wilful misunderstanding or misrepresentation of their opinions. I also find that these experts' testimony will provide information beyond the common knowledge of the trier of fact regarding the causes and consequences of *bronchiolitis obliterans* and the consequences of some of the treatments for it. *See id.* at 591 (explaining that expert testimony assists the trier of fact when it provides information beyond the common knowledge of the trier of fact).

Ultimately, I believe that to exclude these experts' challenged opinions from this case would "invade the province of the jury, whose job it is to decide issues of credibility and to determine the weight that should be accorded evidence." *Vesey*, 338 F.3d at 916-17. This is a case in which vigorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof are not only traditional, but appropriate means of attacking what the defendants contend are shaky opinions by these experts. *Daubert*, 509 U.S. at 595-96; *United States v. Vesey*, 338 F.3d 913, 917 (8th

Cir. 2003). Indeed, some of the purported “*Daubert* grounds” upon which the defendants challenge the opinions of these experts may be effective grounds for impeaching those opinions, but they are not sufficient to exclude those opinions entirely. If I am convinced at trial that any specific opinions of these experts stray beyond their areas of expertise, are unduly speculative, are unduly duplicative, or are otherwise deficient, those opinions can be stricken and the jurors instructed accordingly.

The defendants’ Motions 5 and 6 are denied.

2. *The challenges to certain opinions by any expert*

a. *Opinions about what the defendants “knew” or “should have known”*

In their Motion 8, the defendants seek to exclude any experts’ opinions about what the defendants “knew” or “should have known.” The defendants contend that such opinions would invade the province of the jury. The Stultses argue that opinions about what the defendants “knew” or “should have known” are admissible to the extent that the defendants’ knowledge is relevant to damages “caps” under Michigan law, that such evidence is appropriate under Rule 704 of the Federal Rules of Evidence, and that Dr. Egilman is qualified to render such opinions in this case.

I find that Rule 704(a) of the Federal Rules of Evidence is controlling on this evidentiary issue. As the Eighth Circuit Court of Appeals has explained,

Rule 704(a) provides that expert evidence is not inadmissible because it embraces an ultimate issue to be decided by the jury. If the subject matter is within the jury’s knowledge or experience, however, the expert testimony remains subject to exclusion “because the testimony does not then meet the helpfulness criterion of Rule 702.” [*United States v. Arenal*, 768 F.2d [263,] 269 [(8th Cir. 1985)]. Opinions that “merely tell the jury what result to reach” are not admissible. Fed.R.Evid. 704 advisory committee’s note.

Lee v. Andersen, 616 F.3d 803, 808–09 (8th Cir. 2010); *United States v. Whitted*, 11 F.3d 782, 785 (8th Cir. 1993) (noting that, although Rule 704(a) allows expert testimony that “embraces an ultimate issue to be decided by the trier of fact,” it does not allow “[o]pinions that are ‘phrased in terms of inadequately explored legal criteria’ or that ‘merely tell the jury what result to reach’” (quoting FED. R. EVID. 704, Advisory Committee Note)). Here, the subject matter of what experts in a field—such as the makers of butter flavorings containing diacetyl—might have known or should have known from certain scientific information, medical reports, or experiments is not “within the jury’s knowledge or experience.” *Id.*; see also *Daubert*, 509 U.S. at 592 (second step in the analysis); *Kudabeck*, 338 F.3d at 860 (same). To the extent that an expert adequately demonstrates a basis for an opinion about what the defendants knew or should have known from such information that was within the defendants’ possession, then such an opinion may be admissible at trial, if the proper foundation is laid.

The defendants’ Motion 8 is denied.

b. Opinions about David’s need for a lung transplant

In their Motion 9, the defendants seek to exclude any opinions that David Stults potentially needs a lung transplant. The defendants contend that such opinions are based only on speculation. The Stultses contend that the defendants have mischaracterized the experts’ opinions about David’s need for a lung transplant, which they contend are not mere speculation, but establish that David will “most likely” need a lung transplant during his lifetime, even if his condition is momentarily “stable.”

The defendants’ challenge to expert opinions about David’s potential need for a lung transplant is essentially a challenge to the factual basis for such opinions. Again, I find that the defendants’ challenges to these opinions are based on portions of reports or deposition testimony taken out of context and/or on wilful misunderstanding or misrepresentation of the opinions. Contrary to the defendants’ contentions, from my

review of the evidence in question, I find that these opinions have an adequate factual basis, reflecting an adequate level of medical probability, so that submission of such opinions to a jury is warranted. I am also convinced that such expert testimony, which is well beyond the ken of the average juror, is relevant and will aid the trier of fact. *Daubert*, 509 U.S. at 592 (second step in the analysis); *Kudabeck*, 338 F.3d at 860 (same).

The defendants' Motion 9 is denied.

B. Challenges To Characterizations

Two of the defendants' evidentiary motions challenge what I would describe as "characterizations." That is, they challenge how certain information or the diacetyl at issue in this lawsuit is described, explained, or characterized. I will consider these "characterization" challenges in turn.

1. Characterization of diacetyl as comparable to substances spawning mass toxic tort litigation

In their Motion 1, the defendants challenge any comparison of diacetyl and/or the vapors from microwave popcorn with butter flavorings containing diacetyl to other substances that have given rise to mass toxic tort litigation. The defendants argue that comparisons of diacetyl to substances such as asbestos, benzene, Agent Orange (or dioxins and furans), PCB, or lead, are irrelevant and any probative value that such comparisons might have is substantially outweighed by the potential for unfair prejudice, confusing the issues, and misleading the jury. The Stultses argue that such comparisons or analogies may assist the jurors in understanding the evidence in this case, and are not unfairly prejudicial, confusing, or misleading, because such analogies would be useful "teaching tools." For example, they argue that such evidence may help jurors understand why some individuals exposed to a toxic substance develop diseases, while others do not.

They contend that such analogies are not unfairly prejudicial, because jurors are capable of understanding the use of analogies to understand a concept, then to assess the dangers of diacetyl on evidence relating to it.

I agree with the defendants that characterizing diacetyl as like or on a par with substances that are generally known to be hazardous or the subject of mass toxic tort litigation, such as asbestos, benzene, Agent Orange (or dioxins and furans), PCB, or lead would have little probative value, if any. Moreover, I agree with the defendants that whatever probative value such a characterization might have would be substantially outweighed by the potential for undue prejudice, confusion, or misleading of the jury, such that it should be excluded pursuant to Rule 403 of the Federal Rules of Evidence. Likening substances that have led to well-known mass tort litigation to a largely unknown substance that, by any estimation, has caused relatively rare incidences of disease, would be inflammatory and, indeed, might invite jurors to base their verdict on an improper emotional basis, rather than on the evidence before them. *See* FED. R. EVID. 403, Advisory Committee Notes (explaining that a decision on an “improper basis” is “commonly, though not necessarily, an emotional one”); *see also United States v. Jiminez*, 487 F.3d 1140, 1145 (8th Cir. 2007) (quoting this note); *United States v. Dierling*, 131 F.3d 722, 730-31 (8th Cir. 1997) (considering whether evidence was unfairly prejudicial, because it might lead to a decision on an improper basis, where it purportedly had no connection to the charged offense and revealed grisly or violent behavior that made the defendant appear “dangerous”). Such a comparison would also confuse the issues, mislead the jurors, and waste time, as “mini-trials” would likely result concerning the extent to which diacetyl is or is not like asbestos, benzene, Agent Orange, PCB, lead, or other such infamous toxic substances. *See* FED. R. EVID. 403 (including confusion of the issues, misleading the jury, and waste of time as grounds for excluding otherwise probative evidence).

That said, my review of the opinions presented by the Stultses shows that the references to such hazardous substances spawning mass toxic tort litigation are not characterizations of diacetyl as like or on a par with those substances. Rather, the opinions contain passing references to such substances and their health effects as analogies or “teaching tools” to explain certain concepts or the possibility of a range of health effects from toxic substances—such as the fact that a toxic substance may cause disease in some people, but not in others. As such, these portions of expert opinions are probative to explain to jurors concepts beyond their knowledge and experience, and they are not unduly prejudicial. *Cf. Kuiper v. Givaudan, Inc.*, 602 F. Supp. 2d 1036, 1049 (N.D. Iowa 2009) (ruling in diacetyl flavoring case permitting the plaintiff’s expert to refer to other hazardous substances as examples, but not to expound on them). Furthermore, in the jury instructions, I will constantly remind the jurors that they must base their findings on evidence concerning diacetyl, thus eliminating the defendants’ overblown fears of unfair prejudice. *See, e.g., United States v. Cowling*, 648 F.3d 690, 699 (8th Cir. 2011) (“Moreover, the risk of unfair prejudice was reduced by a cautionary instruction to the jury, given when the evidence was first admitted.”); *United States v. Young*, 644 F.3d 757, 761 (8th Cir. 2011) (concluding that the district court did not abuse its discretion in admitting evidence for the limited purpose set forth in its instruction); *United States v. Walker*, 470 F.3d 1271, 1275 (8th Cir. 2006) (“[A] limiting instruction [concerning proper use of evidence of a prior conviction] diminishes the danger of unfair prejudice arising from the admission of the evidence.”); *see also* FED. R. EVID. 105 (requiring a limiting instruction when the court admits evidence for a limited purpose).

The defendants’ Motion 1 is denied.

2. Characterization of NIOSH's "recommendations" as "conclusions"

In their Motion 2, the defendants challenge characterizations of what they call "recommendations" by the National Institute for Occupational Safety and Health (NIOSH)¹ as "conclusions," "legal conclusions," or "scientific conclusions." The defendants argue that NIOSH's "suppositions" or "recommendations" should not be characterized as "conclusions," because NIOSH was not held to the same standards of causation imposed by law, physicians, or scientists. The defendants assert that NIOSH is a regulatory agency, so that it employs a lower threshold of proof in promulgating regulations than is used in tort law. The Stultses argue that NIOSH's findings fall within the ordinary meaning of "conclusions," so that using that characterization is not substantially unfair or incendiary. The Stultses also argue, with no citation to any authority, that NIOSH's findings and recommendations are of the type regularly relied on by experts in the field. Even if NIOSH was held to a different standard of causation than tort law requires, the Stultses argue, NIOSH's conclusions are not irrelevant, and the defendants will have the opportunity to present evidence concerning any alleged weakness in NIOSH's conclusions.

In my view, there is simply no need to characterize NIOSH's findings, conclusions, or recommendations in any way other than NIOSH itself has done in any report. Any additional characterization of these recommendations, findings, or conclusions as "scientific" or "legal" conclusions is what appears to be the basis for the defendants' "prejudice" argument under Rule 403, but the Stultses do not assert that any

¹ NIOSH is the federal agency responsible for conducting research and making recommendations for the prevention of work-related injury and illness. 29 U.S.C. § 671(c)(1). NIOSH is part of the Centers for Disease Control and Prevention (CDC) in the Department of Health and Human Services. *See generally* www.cdc.gov/NIOSH/about.html.

particular characterization beyond “conclusion” is appropriate. The findings, conclusions, or recommendations by NIOSH are themselves admissible for two reasons. First, I have previously concluded that NIOSH reports are relevant to the question of whether diacetyl causes lung disease. *See Kuiper*, 602 F. Supp. 2d at 1047. Second, I now conclude that, to the extent that the NIOSH reports were known to the defendants, they are also relevant to the defendants’ knowledge (and timing of such knowledge) of potential health hazards from diacetyl.

The defendants’ Motion 2 is denied.

C. Evidence Of Other Diacetyl Cases

The defendants have asserted two evidentiary motions, their Motions 3 and 10, challenging evidence of other diacetyl cases. The Stultses argue that such evidence is admissible.

1. Out-of-court statements about other cases

In their Motion 3, the defendants seek to exclude any evidence of statements made by out-of-court declarants, including Cecile Rose, M.D., and E. Neil Schachter, M.D., regarding other microwave popcorn cases and other plaintiff-consumers of microwave popcorn. The defendants contend that such statements are inadmissible hearsay, irrelevant and unfairly prejudicial, not the proper subject of expert testimony, and would potentially necessitate mini-trials on tangential issues. The Stultses argue that the statements by Dr. Rose and Dr. Schachter are not hearsay, because they are not being offered for the truth of the matter asserted, but to show notice of the potential hazards of diacetyl to consumers of microwave popcorn. Even if such statements are hearsay, the Stultses contend that they are excepted from the hearsay rule by Rule 803(4) (statement for medical diagnosis) and 803(6) (records of regularly conducted activity). They also argue that Dr. Egilman can properly rely on opinions of other doctors and that these

opinions were relevant to forming Dr. Egilman's opinions. The Stultses contend that evidence of other cases of diacetyl causing BO are relevant to defective design, notice of the defect, and causation. Finally, the Stultses argue that the truth may hurt, but that does not make it unfairly prejudicial within the meaning of Rule 403.

I find the Stultses' arguments that the statements about other diacetyl cases are not hearsay, because they will be offered to show notice, not for their truth, more persuasive than either the defendants' arguments that the statements are hearsay or the Stultses' reliance on any hearsay exceptions. FED. R. EVID. 801; FED. R. EVID. 803. I have also recognized in a prior diacetyl/popcorn case that evidence of other cases of BO related to diacetyl, if known to a defendant, are relevant to that defendant's knowledge of possible dangers posed by diacetyl, which, in turn, gives rise to a duty to warn. *Kuiper*, 602 F. Supp. 2d at 1048. At the same time, I observed in that case that relevance of such evidence did not answer the question of its potential for unfair prejudice. *Id.* at 1048-49. I limited the potential prejudice in that case by allowing the plaintiffs to present evidence of workers' compensation claims by employees of a flavoring maker related to diacetyl, but precluding evidence of the outcome of such claims. *Id.* at 1049. I conclude, here, that the Stultses' expert may testify that he relied on out-of-court reports of diacetyl-related injuries in formulating his opinions about the hazardousness or defectiveness of butter flavorings containing diacetyl, to the extent that the Stultses show that an expert would routinely rely on such reports, and the Stultses may disclose those reports to the jury to the extent of offering evidence of Dr. Egilman's knowledge of those reports, without unfairly prejudicing the defendants. *See* FED. R. EVID. 703. The Stultses may also ask representatives of the defendants if they were aware of such reports, as relevant to their notice of possible defects, *see Kuiper*, 602 F. Supp. 2d at 1048, but the Stultses may not expound upon the circumstances involved in those reports.

Thus, the defendants' Motion 3 is granted in part and denied in part.

2. *Evidence of other diacetyl lawsuits or claims*

In their Motion 10, the defendants make a related request that I exclude all testimony and evidence regarding other lawsuits or claims involving diacetyl. The defendants assert that such other lawsuits and claims involve unique circumstances, evidence, and individuals and that evidence about those cases could result in “mini-trials” with the potential risk of confusion and delay. The Stultses argue that evidence of other injuries is relevant to the existence and notice of design defects, the defendants’ ability to correct known defects, the magnitude of the danger, the lack of safety of the product, and causation. The Stultses argue that, although the circumstances of other consumers and workers (particularly, quality control workers) who suffered BO from exposure to diacetyl in microwave popcorn or butter flavorings may not be identical, they are sufficiently similar to be probative and not unduly prejudicial.

The Stultses are correct that, in a prior microwave popcorn/diacetyl case, I observed,

To the extent that consumers of microwave popcorn have suffered bronchiolitis obliterans from their airborne exposure to butter flavorings containing diacetyl, the active ingredient at the center of this litigation, such evidence may well prove relevant to the issue of whether [a flavoring maker’s employee’s] exposure to butter flavorings containing diacetyl caused or contributed to his pulmonary condition.

Kuiper, 602 F. Supp. 2d at 1046. This case presents the obverse situation, a plaintiff consumer’s attempt to offer evidence of other cases of diacetyl-related lung injury, some of which include cases of flavoring maker’s employees, arising from airborne exposure to diacetyl or vapors from diacetyl-flavored microwave popcorn. Nevertheless, I reach the same conclusion regarding relevance of evidence of diacetyl-related lung injury in consumers and, specifically, quality control employees of flavoring makers, arising from airborne exposure to diacetyl or vapors from diacetyl-flavored microwave popcorn. The

difference between this case and *Kuiper* is that the Stultses have adequately identified the evidence of other cases in question for me to conclude, for purposes of the defendants' pretrial evidentiary challenge, that I can rule that the evidence in question is *prima facie* admissible at trial. *Compare id.* at 1047 (finding that neither party had sufficiently identified the evidence of other cases of consumer injury for the court to rule on admissibility pretrial). This does not mean that the Stultses have *carte blanche* to offer any and all such evidence; rather, the defendants are welcome to challenge at trial any such evidence that, in their view, strays too far from similarity to David's circumstances to be probative or that is needlessly cumulative.

The defendants' Motion 10 is denied.

D. Suggestions Of A Per Diem or Lump-Sum For Non-Economic Damages

In their Motion 4, the defendants seek to prohibit the plaintiffs' counsel from suggesting a lump-sum amount for non-economic damages. They argue that such arguments have an "anchoring effect" on jurors, which results in a close correlation between the amount suggested and the amount awarded. They also argue that such suggestions or requests are disfavored in several federal jurisdictions and that Eighth Circuit decisions suggest that such arguments are arbitrary and artificial. Such a suggestion here, they argue, would prejudice them, because it would result in an award based solely on speculation. A substantial part of the Stultses' resistance to this motion is not based on a response to the defendants' arguments, but on allegations that the defendants plagiarized this motion from a "stock" motion readily found on the internet. They contend that defendants' conduct should be sanctioned, that the defendants' out-of-state counsels' *pro hac vice* admission should be revoked, and that the clients of those attorneys should be informed that while the clients were undoubtedly charged for hours

of research, the motion was simply stolen from another author. As to the merits of the evidentiary question, the Stultses point out that there is no prohibition on *per diem* or lump-sum calculations of damages in this Circuit, so long as such calculations are carefully controlled by the court. The Stultses also reject the defendants' "anchoring" arguments as favored in defense bar journals, but not generally accepted. The entirety of the defendants' reply is devoted to demonstrating that the Stultses' plagiarism allegations are baseless, because the firm assisting the defendants' counsel originally drafted the motion on which the internet article identified by the Stultses is based and later furnished a copy of that motion to the employer of the author of the internet article.

I will focus for now on the evidentiary issue. Some time ago, the Eighth Circuit Court of Appeals addressed this issue, as follows:

Although this court has "condemn[ed] [jury] instructions requiring per diem mathematical calculations," we have not disapproved per diem closing arguments provided the "arguments are carefully controlled by the district court." *Vanskike v. ACF Indus.*, 665 F.2d 188, 211 (8th Cir.1981), *cert. denied*, 455 U.S. 1000, 102 S.Ct. 1632, 71 L.Ed.2d 867 (1982). Because [the defendant] did not object during [the plaintiff's] closing argument, [the defendant] cannot now complain the district court failed to adequately control the per diem argument, or properly caution the jury about calculating damages on a per diem basis.

Manning v. Lunda Constr. Co., 953 F.2d 1090, 1093 (8th Cir. 1992). Thus, in this Circuit, there is plainly no *per se* prohibition on such arguments, although there is a burden on the district court to control such arguments and properly instruct the jury.

As to proper cautions to the jury, *id.*, I ordinarily do—and will in this case—inform the jury that damages cannot be based on speculation, guesswork, or conjecture; that non-economic damages cannot be measured by any exact or mathematical standard, so that the jurors must use their sound judgment based upon an impartial consideration

of the evidence; and that damages for pain and suffering require the jurors to consider the nature and extent of the injury, whether the injury is temporary or permanent, and whether the injury results in partial or total disability.

Unfortunately, decisions of the Eighth Circuit Court of Appeals do not clarify what would constitute the required “careful control” that I should also exercise over *per diem* or lump-sum arguments. *See id.* Fortunately, guidance can be found in out-of-circuit decisions in *Baron Tube Co. v. Transport Insurance Co.*, 365 F.2d 858 (5th Cir. 1966), and *Waldron v. Hardwick*, 406 F.2d 86, 89 (7th Cir. 1969), two of the cases on which the Eighth Circuit Court of Appeals relied in formulating its “careful control” requirement. *Vanskike*, 665 F.2d at 210-12 (citing *Baron Tube* and repeatedly citing *Waldron*). Specifically, in *Waldron*, the court explained,

The court [in *Baron*] stated:

The safeguards which may be utilized may take the form of requiring that counsel notify the court and opposing counsel in advance of argument that the unit of time argument will be made. Since charts are generally used, they should be carefully scrutinized to eliminate any false factual impressions. * * * And, as Judge Brown went on to say in his dissent (in *Johnson v. Colglazier*, 348 F.2d 420 (5th Cir. 1965)): ‘* * * to assure effective complete policing, the Court can construct the charge, either general or on special interrogatories, so that each element is separately fixed. (Rule 49, F.R.Civ.P.) The Judge can readily tell whether the verdict is measurably infected on this element by an extravagant runaway jury.’ Lastly, it goes without saying that the court has ample control over excessive verdicts.

Waldron, 406 F.2d at 89 n.6 (quoting *Baron Tube*, 365 F.2d at 865).

Here, the defendants are clearly on notice that a *per diem* or “lump-sum” argument concerning non-economic damages may be made in this case. *Id.* If the Stultses’ counsel

intends to use any demonstrative aids in support of such an argument, those demonstrative aids must be provided to opposing counsel and the court, and I will carefully scrutinize them. *Id.* I also routinely require the jury to break down damages awards category-by-category, and I will do so in this case. *Id.* Finally, I will carefully scrutinize any resulting verdict. *Id.*

The defendants are not entitled to a pretrial prohibition on any *per diem* or “lump-sum” arguments concerning non-economic damages, and the defendants’ Motion 4, seeking such a prohibition, is denied.

E. Challenges To The BASF Study And Material Safety Data Sheet

The last of the defendants’ evidentiary motions that I must address is their Motion 7, which seeks to exclude argument or evidence regarding the secret 1993 LC 50 study (1993 BASF Study) conducted by the German company BASF and the misleading 1994 BASF material safety data sheet (1994 BASF MSDS). The defendants contend that the 1993 BASF Study was not known outside of Germany until 2001, and was the first study to attempt to ascertain whether diacetyl could cause disease in the lungs of animals by raising the concentration level of diacetyl that the animals were forced to inhale until it reached the point that fifty percent of the rats died. According to the defendants, the 1994 BASF MSDS was for BASF’s pure diacetyl product, and it did not discuss the chronic effects of inhalation of diacetyl.

In support of its Motion to exclude these items of evidence, the defendants argue that these items are irrelevant and unfairly prejudicial. More specifically, they argue that these items are irrelevant to any issue in this case, because they were unknown to anyone outside of Germany until 2001, after a study of an outbreak of diacetyl-related lung disease in a United States plant had been published; the 1994 BASF MSDS related to

pure diacetyl; the 1994 BASF MSDS does not address chronic effects of inhalation of diacetyl; and even the Stultses' expert describes the 1994 BASF MSDS as misleading. The Stultses contend that I have already adequately addressed the admissibility of these items of evidence in a prior diacetyl/popcorn case. They also contend that both defendants had access to either the 1993 BASF Study or a summary of it in the 1994 BASF MSDS well before 2001. They argue that both items are relevant here, because they involved the dangers of inhalation of diacetyl. Thus, they contend that these items are relevant to defectiveness and duty to warn.

The Stultses are correct that, in a prior diacetyl/popcorn case, I addressed the admissibility of the 1993 BASF study, as follows:

Defendant Givaudan next requests the court to preclude the Kuipers from arguing that an unpublished 1993 report from the German company BASF, entitled "Study on the Acute Inhalation Toxicity of Diacetyl FCC as Vapor in Rats 4-Hour Exposure", provided notice to Givaudan of the alleged inhalation hazards of diacetyl. Defendant Givaudan contends that such evidence is not relevant on the issue of Givaudan's notice or knowledge of any alleged inhalation hazard allegedly associated with diacetyl. The Kuipers counter that the BASF study is both relevant and admissible on the issue of whether the dangers of diacetyl were reasonably foreseeable and scientifically discoverable at the time of Ronald Kuiper's exposure to Givaudan's products.

The 1993 study at issue was performed by BASF, the parent company of one of Givaudan's diacetyl suppliers, Fritzsche, Dodge & Olcott. The results of the study purport to show the toxic effects of inhaled diacetyl on rats. Under Iowa law, as a manufacturer, Givaudan is held to have the knowledge of an expert and therefore should have known of the hazards inherent in their products. *See Beeman v. Manville Corp. Asbestos Disease Comp. Fund*, 496 N.W.2d 247, 252 (Iowa 1993) ("As manufacturers, defendants are held to have the knowledge of experts; therefore they should

have known of the hazards inherent in their asbestos products.”). A duty to warn exists when a party “reasonably foresee[s] a danger of injury or damage to one less knowledgeable unless an adequate warning is given.” *Beeman*, 496 N.W.2d at 252 (citing *Lakatosh v. Diamond Alkali Co.*, 208 N.W.2d 910, 913 (Iowa 1973)). Thus, reasonable foreseeability of danger to users of a product triggers the duty to warn. A manufacturer has no duty to warn when it did not or should not have known of the danger. *Moore v. Vanderloo*, 386 N.W.2d 108, 116 (Iowa 1986). Here, the court concludes that the 1993 BASF report is relevant on the issue of Givaudan's duty to warn. Therefore, this portion of defendant Givaudan's motion is denied.

Kuiper, 602 F. Supp. 2d at 1052-53.

I reject the defendants’ relevance objections based on purported differences between the nature of and manner of exposure to the diacetyl involved in the 1993 BASF Study and the 1994 BASF MSDS. Those issues are properly addressed in vigorous cross-examination, and these items are both relevant and admissible on the issue of whether the dangers of diacetyl were reasonably foreseeable and scientifically discoverable at the time of David Stults’s exposure to the defendants’ products. *See id.* My decision on the admissibility of these items of evidence in *Kuiper* is distinguishable in some important respects, however. First, the Stultses have not argued—at least, not in their response to this evidentiary motion—that the defendants can be held to have the knowledge of an expert and to have known the hazards inherent in their product, as did the plaintiffs in *Kuiper*. Second, the defendant in *Kuiper* did not argue, as the defendants do here, that there was no basis for a finding that it knew or should have known of the danger of diacetyl because of the 1993 BASF Study or the 1994 BASF MSDS. Here, it is apparent from the parties’ arguments on this motion and supporting evidence that there is a factual dispute about when the defendants gained knowledge of either the 1993 BASF Study or the 1994 BASF MSDS. Those factual disputes preclude me from determining the

admissibility of these items of evidence until pertinent evidence about the timing of the defendants' knowledge of the 1993 BASF Study and/or the 1994 BASF MSDS is presented.

The defendants' Motion 7 is denied.

***F. Evidence Of The Stultses' Settlements
With Other Defendants***

The only category of evidence that the Stultses seek to exclude is any reference to their settlements with other defendants. They argue, in essence, that the fact that a settlement was reached and the amount of any settlement is completely irrelevant, immaterial under Iowa's Comparative Fault Act,² and has no bearing on the issues to be decided by the jury in this case. Somewhat more specifically, they argue that, in this case, there is no dispute that certain defendants have been released from pending litigation under a settlement agreement, that they are prepared to stipulate that settling defendants are "released parties" for purposes of comparative fault, but that evidence concerning the terms of settlement between them and the settling defendants is not admissible. The defendants counter that the settlement agreements themselves are relevant to the issue of damages in this case and admissible to combat the plaintiffs' damages claims, because proceeds received from settlements will influence David's decision to retire. They also

² At the time that the parties' evidentiary motions were filed, the issue of whether Iowa law or Michigan law would apply was hotly contested. In my December 24, 2013, Memorandum Opinion and Order Regarding Defendants' Motions For Summary Judgment (274) at 45, however, I concluded that Michigan substantive law would apply. *See Stults*, ___ F. Supp. 2d at ___, 2013 WL 6815062 at *23. The Michigan comparative fault statute, MCL 600.6304, provides that the trier of fact shall determine "[t]he percentage of the total fault of all persons that contributed to the death or injury, including each plaintiff and each person released from liability under section 2925d, regardless of whether the person was or could have been named as a party to the action."

contend that the settlement agreements can be used to cross-examine the Stultses' witnesses for bias, because they might suggest a motive to place undue weight on the liability of the remaining defendants.

As the Eighth Circuit Court of Appeals has recognized, Rule 408(a) of the Federal Rules of Evidence "prohibit[s] the use of settlement documents at trial to prove liability or to impeach through inconsistent statements or contradiction," *Government of Ghana v. ProEnergy Servs., L.L.C.*, 677 F.3d 340, 344 (8th Cir. 2012), although Rule 408(b) provides that such evidence "may be admitted "when the evidence is offered for another purpose, such as proving bias or prejudice of a witness, negating a contention of undue delay, or proving an effort to obstruct a criminal investigation or prosecution."'" *B&B Hardware, Inc. v. Fastenal Co.*, 688 F.3d 917, 920 (8th Cir. 2012) (quoting *Athey v. Farmers Ins. Exch.*, 234 F.3d 357, 362 (8th Cir. 2000), in turn quoting Rule 408 (2000)); *see generally id.* (noting that the principles in Rule 408 have not been modified by amendments in 2006 and 2011). Although the defendants are, thus, correct that settlement documents might be admissible to establish bias or prejudice of the Stultses' witnesses, the defendants have not explained why the identification of settling defendants would not be sufficient to establish such a bias and why the settlement documents themselves would not be cumulative or more prejudicial than probative under Rule 403. *Ghana*, 677 F.3d at 344 n.4.

I also am not persuaded by the defendants' argument that the settlements with other defendants are relevant, because the proceeds of those settlements may influence David's retirement decisions. This appears to me to be, at worst, an attempt to get in through the back door the precise information that Rule 408 was intended to preclude, because, for example, it would unduly prejudice a determination of the total fault and proper apportionment of fault, because the plaintiffs have already been partially compensated. At best, introduction of the amount of settlement proceeds provides more information

than is necessary to establish the relevant point about David's actual financial resources and their influence upon his decision to retire. Thus, I conclude that the existence of proceeds of settlements with other defendants is only admissible if described as "other resources" affecting David's financial condition, without explanation of the source of those resources. *Cf. Flint Hills Resources, L.P. v. Lovegreen Turbine Servs., Inc.*, Civil No. 04-4699 (JRT/FLN), 2008 WL 4527816, *6 (D. Minn. Sept. 29, 2008) (holding that carefully controlling evidence of "other source" payments, including an instruction that the jury should not speculate as to the source of the payments or draw inferences regarding liability from the existence of such resources, "avoid[ed] the prohibited purposes articulated in Rule 408" and insured that the evidence did not inappropriately affect the verdict). Here, this procedure will avoid any inappropriate impact of evidence that the Stultses have settled with certain defendants on the jury's damages and comparative fault determinations.

The Stultses' Motion is granted.

III. CONCLUSION

Upon the foregoing,

1. The defendants' December 9, 2013, Motion In Limine To Exclude Any Argument Or Evidence Comparing Diacetyl And/Or Vapors From Microwave Popcorn Containing Butter Flavors With Added Diacetyl To Asbestos And Other Substances Subject To Mass Toxic Tort Litigation (docket no. 240) is **denied**;

2. The defendants' December 9, 2013, Motion In Limine To Exclude Reference To Recommendations From NIOSH As "Conclusions," "Legal Conclusions," Or "Scientific Conclusions" (docket no. 241) is **denied**;

3. The defendants' December 10, 2013, Motion In Limine To Exclude Any Evidence Of Statements Made By Out-Of-Court Declarants, Including Cecile Rose, M.D.

And E. Neil Schachter, M.D., Regarding Other Microwave Popcorn Cases And Other Plaintiff-Consumers Of Microwave Popcorn (docket no. 244) is **granted in part and denied in part**, as explained above;

4. The defendants' December 10, 2013, Motion In Limine To Prohibit Plaintiffs' Counsel From Suggesting A Lump-Sum Amount Of Non-Economic Damages (docket no. 246) is **denied**;

5. The defendants' December 10, 2013, Joint Motion In Limine To Exclude The Opinions And Testimony Of Plaintiffs' Purported Expert, Dr. Charles Pue (docket no. 247) is **denied**;

6. The defendants' December 10, 2013, Joint Motion In Limine To Exclude Purported Expert Opinions Of Rodney A. Swenson, Ph.D., ABN (docket no. 248) is **denied**;

7. The defendants' December 10, 2013, Motion In Limine To Exclude Argument Or Evidence Regarding The Secret 1993 LC 50 Study Conducted By The German Company BASF And The Misleading 1994 BASF Material Safety Data Sheet (docket no. 249) is **denied**;

8. The defendants' December 10, 2013, Motion In Limine To Preclude Plaintiffs' Expert Witnesses From Offering Opinions About What Defendants "Knew" Or "Should Have Known" (docket no. 250) is **denied**;

9. The defendants' December 10, 2013, Joint Motion In Limine To Exclude All Testimony Regarding Plaintiff David Stults' Alleged Potential Need For A Lung Transplant (docket no. 251) is **denied**;

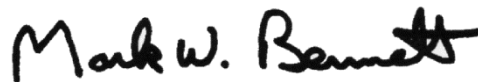
10. The defendants' December 10, 2013, Joint Motion In Limine To Exclude All Testimony And Evidence Regarding Other Lawsuits Or Claims Involving Diacetyl (docket no. 254) is **denied**; and

11. The Stultses's December 10, 2013, Motion In Limine To Exclude Any Reference To Plaintiffs' Settlements With Other Defendants (docket no. 253) is **granted** as to any evidence beyond the fact of the Stultses' settlement with specified defendants, as they have stipulated.

IT IS FURTHER ORDERED that, to avoid exposure of potential jurors to information about challenged evidence, this ruling shall be sealed until **ten days after completion of the trial or notice of any settlement**, *unless* a party files a motion within that ten-day period showing good cause why the ruling should remain sealed.

IT IS SO ORDERED.

DATED this 18th day of July, 2014.

A handwritten signature in black ink that reads "Mark W. Bennett". The signature is written in a cursive, slightly stylized font.

MARK W. BENNETT
U.S. DISTRICT COURT JUDGE
NORTHERN DISTRICT OF IOWA